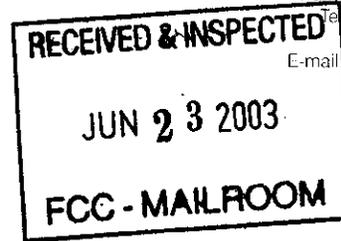


**Frank M. Leshner**  
Executive Vice President  
Law, Intellectual Property and External Affairs

**SONY**

**Sony Electronics Inc.**  
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June 20, 2003

W. Kenneth Ferree  
Chief, Media Bureau  
Federal Communications Commission  
Washington, D.C. 20554

Dear Mr. Ferree:

Sony Electronics Inc. ("Sony") is pleased to respond to your request for information on aspects of the digital television ("DTV") transition. Sony strongly supports the digital transition, which is bringing dramatic improvements in television to consumers. Our answers to each of your questions follow.

**(1) Your current and planned efforts to promote digital television and educate consumers about the DTV transition:**

Sony is actively promoting a broad line of DTV products that are enjoying significant success in the consumer marketplace. Our 2003 product line includes eight models of high definition digital televisions with integrated tuners and 30 models of digital monitors (all but two of which are high definition), including market-share leading plasma, LCD panel, front projection, rear projection, and flat-screen CRT Hi-Scan displays. Consumers combine Sony digital monitors with our new HD-200 high definition digital receiver, which combines ATSC broadcast and DirecTV high definition digital reception capability. We expect to announce additional models of televisions, monitors, and set-top receivers in the upcoming months.

Sony promotes consumer awareness of these digital products through direct marketing, retail, and other communications that clearly explain to the consumer the terminology, features, and advantages of digital television. In fact, consumer electronics ("CE") manufacturers in general have played the leading role to date in promoting and informing consumers about the DTV transition.

**(2) Your plans for meeting the Commission's implementation schedule for digital broadcast reception capability adopted August 8, 2002:**

Sony will comply fully with the Commission's regulations to include digital over-the-air tuners in televisions and other DTV products on a phased-in schedule starting in July 2004. In addition to our current products with integrated tuners as described above, we will be announcing new digital products meeting these requirements throughout the year leading up to July 2004 and beyond.

**(3) Whether you will include an ATSC over-the-air tuner in all digital television sets you produce with an integrated QAM tuner for "plug and play" cable compatibility, and, if not, why not:**



In Sony's view, cable compatibility is essential to the DTV transition. With some 70 percent of U.S. households depending on cable for their primary television signal, we expect the large majority of new TVs will continue to be purchased for use on cable systems. "Plug and play" compatibility with digital cable—the ability to use digital TVs without a set top box—will go far toward making DTV attractive to consumers. Combined with an increase in the availability of attractive digital programming on cable systems, cable compatibility is the crucial factor in the DTV transition.

Sony intends to include ATSC over-the-air reception in the digital television sets we make that are plug and play compatible with digital cable systems. As long as over-air digital broadcast content continues to be available to U.S. consumers, we believe that adding ATSC over-the-air reception capability to a DTV product that has the elements for cable compatibility (including tuning, QAM demodulation, high definition MPEG decoding, signal processing, memory, *etc.*) is a highly logical step in terms of technology, cost, and satisfaction of consumer expectations. We look forward to making such products when digital cable compatibility becomes a reality.

As the Commission is aware, together with other CE companies and major cable operators, we have proposed detailed regulations for the Commission's consideration that are necessary to enable digital cable compatibility. Cable compatibility requires more than just a QAM tuner, and the joint cable-CE industry proposals address:

- national standards for cable systems to provide the technical services (*e.g.*, signal format, program and system information, security access cards) that are necessary to support standards-compliant cable-ready consumer products;
- a CableLabs security technology license that complies with the Commission's "Navigation Devices" rules and would dramatically spur innovation for digital cable equipment; and
- content protection regulations intended to ensure an appropriate balance among consumers' reasonable and customary recording expectations, protection of valuable digital content, and freedom of technical innovation.

We urge the Commission to act on these proposals without delay so products entering the market by the beginning of the July 2004 DTV tuner phase-in can be plug and play compatible with digital cable.

**(4) Your current and planned efforts to provide adequate reception of over-the-air digital signals, including, for current and planned DTV tuners, information regarding average tuner noise figures, performance in such areas as rejection of RF signals on adjacent TV channels, IF-related TV channels and image-related TV channels, and performance in the presence of multipath:**

Continual improvement and innovation is paramount to success in the highly competitive television business. With the advent of digital television, the same philosophy of creativity and innovation is required to meet consumer expectations. The fundamental components of digital television receivers are not very different from those of analog receivers, with the key differences being the equalization and demodulation functions. The television industry has made considerable strides in equalization and demodulation performance in the past five years, especially in dealing with multipath signals.

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As a result of these improvements, Sony and the balance of the receiver industry have demonstrated designs that more than adequately meet marketplace performance demands. Sony has observed an absence of customer complaints regarding digital reception. Nevertheless, Sony is concerned that the lack of adequate broadcast signal strength may inhibit sales of digital televisions, because consumers may be unable to determine whether digital signals are present at their location.

Regarding technical parameters for sensitivity, selectivity, and immunity to unwanted signals, design considerations must be weighed against practical application and available technology. Standardizing arbitrary performance values for these parameters is not necessary at this time and would inhibit innovation. Moreover, it is difficult to anticipate the interference effects of new services, unlicensed devices, and unintentional radiators, and for this reason, any receiver performance standard would necessarily be incomplete and anticipatory. The major future challenges we foresee for receiver performance will arise from broadcasters' packing television channels closer together, proposed sharing of broadcast spectrum with new services, and interference from unlicensed devices and unintentional radiators. Ensuring receiver tolerance of these future, largely unknown interference sources requires an immediate emphasis on understanding and characterizing the effects of new services, unlicensed devices, unintentional radiators, and adjacent DTV channel interference on DTV reception.

**(5) Your current and planned deployment of digital connectors (e.g., 1394/5C and/or DVI/HDCP) on DTV sets and digital set-top boxes:**

Sony has been a leader in introducing digital interfaces that support protection of digital content. We have included DVI/HDCP inputs on all new DTV models introduced since 2002, and we have also incorporated 1394/5C connectors on all models with integrated DTV tuners. Sony's current model HD/DirecTV set top box, the HD-200 described above, includes a DVI/HDCP output. We expect to announce additional DTV products with protected digital connectors in the coming months.

I hope that this information is useful to you as you press forward expediently on the most important policy issue currently affecting the digital television transition—the rapid implementation of the cable and consumer electronics industries' proposal for national standards, consumer-friendly licensing terms, and content protection for digital plug and play cable compatible products.

Sincerely,



Frank M. Leshner  
Executive Vice President  
Law, External Affairs, and Intellectual Property  
Sony Electronics Inc.

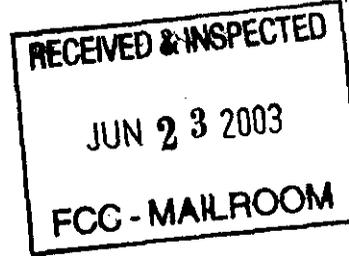
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